



# Harbinger

JULY and AUGUST 2006 VOL 20 NO 4

## Inspirational Insects

During a recent interview, I was asked to relate childhood activities that influenced my decision to select a career in conservation. Immediately, I recalled some of the more grandiose experiences with nature which all took place in the mountains—tent camping in the middle of nowhere, playing in ice-cold mountain streams, hiking in places where I could almost imagine that no human had been before, and night snow skiing under a Milky Way that nearly mirrored the snow below. While these experiences were indeed memorable, other memories came to mind later that were just as vivid, although surprisingly ordinary. These adventures didn't require travel; they simply took place in my own backyard and involved insects.

In truth, the cottonwood borer—a large, 1½ inches long, black and white beetle—was my first real source of inspiration. Growing up in an urban environment in Kansas is about as uninspiring as most people can imagine. However, the wilds of my backyard, devoid of landscaping and fussy manicuring, provided hours of entertainment for me and habitat for a myriad of miniature life forms. I awakened early on many summer mornings with one goal in mind—to find another one of these huge beetles which I found both intriguing and reviling. I had no idea what the insect was, but I knew I could often find it associated with the huge cottonwood tree in my backyard. It was years later that I learned the identity and life history of this beetle.

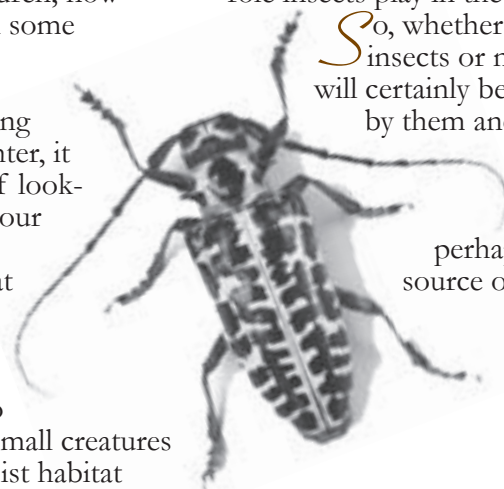
My backyard was home to many fascinating life forms from the sublime—butterflies, ants, and other beetles—to the seemingly dangerous. I was particularly drawn to the bees that completely covered the blooming sedums surrounding the back patio and to the wasps that nested in the rotten end of the clothesline pole. Fireflies dominated the evening hours and I never tired of trying to capture (and later release) as many as I could find. Anything that crawled or flew attracted my attention during the day. September found me outdoors immediately after returning home from school armed with a magnifying glass. There was something absolutely amazing in watching the honeybees work the flowers to gather pollen. Although I wouldn't recommend it now, I couldn't resist gently picking them up by their wings for a better look. The challenge was to both avoid being stung and to release the bees unharmed.

I also asked my children, now teenagers, to recall some of their first outdoor memories and each related stories involving insects. For my daughter, it was the excitement of looking under the logs in our backyard to examine closely everything that lived both underneath and within the log. A stick was all that was needed to unearth all kinds of small creatures living in the dark, moist habitat

the log provided. For my son, it was memories of camel-backed crickets often found near the air vents in the bathroom and the huge black carpenter ants found on our patio. For both, discovering these insects was a mixture of great excitement and sometimes of fear.

Insects are fascinating, especially to kids. And whether you love them or are completely repulsed by them, insects are certainly numerous, easy to find, and very accessible. They provide some of the best intimate moments with nature for kids. Lying belly down in the grass provides a front row view to some of the best nature action available to kids outside of what they view on television, but this action is real. To learn more about insects, plan on attending our annual *Insect-O-Rama* event on Friday, August 25, from 6:30–9pm. See insects up close, visit with insect experts, and learn more about the role insects play in the wild.

So, whether you love insects or not, your kids will certainly be entertained by them and find them as an endless source of discovery, and perhaps, even, as a source of inspiration.



Linda Chorice

## The View From The Bridge

Kids need nature. We all know it on some intrinsic level, and thanks to a recent publication, facts are now available about the effects of growing up without intimate contact with nature. Author Richard Louv chronicles these in his latest book, *Last Child In The Woods: Saving Our Children From Nature-Deficit Disorder*. While this disorder isn't a clinically- or scientifically-based diagnosis, it does amply describe what children are missing.

When I was growing up, everyone played outdoors. We all had time for unstructured play to discover the joy and wonder of nature. Today, things are drastically different. While more kids are involved in structured activities, like sports, there is less time spent simply playing and dreaming. And despite the fact that kids are so involved in organized activities, there are far more health problems in kids related to obesity today. More natural-looking areas are also being converted into flat, graded fields to accommodate these activities thereby decreasing the places where kids can discover nature.

According to Louv's book, the average American child spends 170 minutes a day watching television which is 9 times more than time spent in physical activity, and 101 minutes a day traveling in a car. Louv also sites that unlike spending time in nature, "television doesn't amplify time; it steals it."

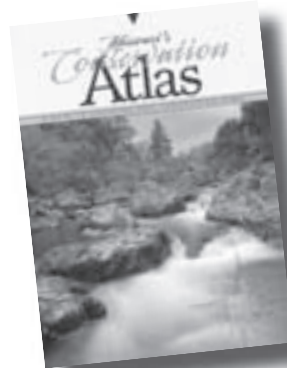
Even recess time in schools has been drastically reduced. With increased pressure on teachers to have their students perform at higher levels and a greater threat of litigation from playground accidents, less time is spent on the playground. Today's kids know more about acid rain, endangered species, and ozone depletion—things of gloom and doom—rather than the joy and wonder of nature. Sadly, for many, nature is something abstract with kids having more knowledge about tropical rainforests than they do about the forests in Missouri.

Parents, too, often provide barriers for kids to connect with nature. Lack of time and fear of strangers, traffic, and of nature itself can interfere with a child's opportunity to experience nature. While all of these fear factors are based on reality, oddly enough, the Environmental Protection Agency sites indoor air pollution as the number one public health threat stating that air indoors is 2 to 10 times more toxic than the air outdoors. Parents, too, often want experiences in nature to be perfect, which decreases the opportunity for kids to simply enjoy the outdoors.

We have just the cure for "nature-deficit disorder." The nature center is nearby so time isn't an issue. We offer guided programs so no nature expertise is required. And, spending any time on the trail is guaranteed to help you and your family connect with nature and to experience the joy and wonder of being outdoors. In the process, you'll undoubtedly learn more about conservation as well. And that is exactly the reason why the nature center exists.

 Linda F. Chorice  
Nature Center Manager

## The Nature Nook Gift Shop



**20%  
Off**

July and  
August  
Featured  
Publication

## MISSOURI'S CONSERVATION ATLAS

As a Missouri citizen, you share in the ownership of nearly 1,000 conservation areas. To help you discover and enjoy them, the Missouri Department of Conservation has published a new atlas. Improving upon our popular former edition, we have included color topographical county maps grouped under eight regions. The easy-to-read maps feature more than 900 areas owned, managed, or leased by MDC. Adjacent to each is a separate listing of its areas, accompanied by driving directions, recreational opportunities, and facilities. Additionally, areas with shooting ranges and disabled-accessible facilities are highlighted on two separate pages in back. Spiral binding lets the book lie flat on your vehicle seat. 240 pages.

**Discounted price: \$15.20 plus tax.**  
Heritage card discount does not apply.

## Temporary Displays

**July**

**Junior Duck Stamp Art**

**August**

**Insect and Natural  
History Photography**

by Photographer and Entomologist  
**Dr. Thomas J. Riley**

## Thank You

The nature center would like to thank Heather Davis for craft items; PetSmart for birdseed; Wild Birds Unlimited for birdseed and suet; and Tracy Sheets, Marie and Ben Parker, Roger Pfeiffer, Jim Hunter, and Mike Collins for natural objects. A special thank you to Russ Crapenhof of Comfort Heat and Air for an ice-maker. We appreciate all of you!

*The Springfield Conservation Nature Center is located in southeast Springfield just west of US-65 off the James River Freeway (US-60). The area is open daily 8am to 9pm from March 1 to October 31, and 8am to 6pm during the remainder of the year. The building is open daily from 8am to 5pm year 'round. The building and area are closed on Thanksgiving, Christmas, and New Year's Day. The area is closed to pets, bicycles, roller blades, hunting, fishing, collecting, and alcoholic beverages. No fees are charged.*

Phone: 417/888-4237 Fax: 417/888-4241 <[www.mdc.mo.gov/areas/cnc/springfd](http://www.mdc.mo.gov/areas/cnc/springfd)>



# ASK The Naturalist



Seasonal changes spark many questions. In this section, we answer some common questions about natural events.

## How does a firefly make light?

The process in which fireflies make light is called bioluminescence. A firefly produces its light by mixing two chemicals called luciferin and its enzyme luciferase. The chemical reaction also requires some chemical energy. This light produces almost no heat, therefore it is referred to as cold light.

## What are those crayfish that are almost as big as lobsters?

Those crayfish are called the longpincered crayfish (*Orconectes longidigitus*). They can be up to ten inches long from their tail to the end of their pincers. They can only be found in streams or lakes with permanent water flow and a silt-free bottom substrate in the White River drainage of southern Missouri and northern Arkansas.

## Why is jewelweed also called "touch-me-not"?

This plant produces a small orange flower that is shaped like a cornucopia. The plant has a slender fruit about one inch long. When the fruit is touched, the seeds are propelled outward and away from the plant, hence the name "touch-me-not." Dew often accumulates in glistening droplets on leaves, giving rise to the other common name, "jewelweed."

## Chipping In . . . Steve Craig



The sound of rustling leaves or a shadow moving through the forest draws the attention of inquiring minds in the hope of getting a better glimpse. All the while, the imagination runs free at the thought of what was seen. Magic can do the same thing—draw your curiosity and make you think about how it was performed. Volunteer Naturalist Steve Craig has a special talent of bringing nature and magic together to educate and entertain people about fishing.

Steve and his wife, Amy, seamlessly blend conservation and magic together in their act called "The Fishin' Magicians." They travel and perform across the country at fishing events, boat shows, fairs, festivals, and at other venues for environmental organizations. Steve's illusions include subtle information about fish and their habits. By keeping it both fun and educational, he inspires others to pick up a rod and reel and head to a fishing hole.

Steve's first two loves—fishing and magic—were pulled together to create his current vocation. He caught his first fish at the age of six and he has been hooked ever since. Fishing, trout fishing in particular, is one of the things he enjoys talking to visitors about when he's working the front desk. His interest in magic also started at an early age. By the age of thirteen, he was entertaining groups of kids by performing at birthday parties. He didn't bring together his love of fishing and magic until much later in life. After graduating college, he worked three years as a mental health counselor before changing careers to a magician. It wasn't until Steve and Amy were invited to perform at the nature center in 1996 that they found their niche as "The Fishin' Magicians."

When Steve is not on the road performing or at home inventing new illusions, he tries to fit in one of his many outdoor hobbies, such as fly-fishing, fly-tying, camping, hiking, canoeing, and birding.

Steve is an avid fly-fisherman and has learned even more about this sport through the Stream Team program he's been a part of for six years. By testing the water quality of streams, he has learned more about the aquatic insects that live in streams and that trout prefer. He has also used his magic touch to help teach others during programs on tying fly lures to mimic those same aquatic insects. During *Insect-O-Rama*, he teaches others about the life cycle of all those underwater little bugs. If it relates to fish, Steve's involved!

Whether Steve is enlightening others through his magic, on a stream sampling for water quality, assisting with a program, or giving out information at the front desk, one thing is for certain—it's that magic touch that helps people connect with nature. So please be sure to thank Steve for chipping in.

## Volunteer Milestones

Dan Liles ..... 1000 Hours  
Andy Busch..... 750 Hours  
Janine Barry..... 750 Hours  
Tracy Richter..... 750 Hours  
Steve Craig..... 500 Hours

Sue Schuble ..... 500 Hours  
Louis Rousselot ..... 200 Hours  
Carol Snyder..... 200 Hours  
Trent Armour ..... 100 Hours

Anna Cross..... 100 Hours  
Jill Daniels ..... 100 Hours  
Teddy Heaton ..... 100 Hours  
Jenay Lamy ..... 100 Hours  
Tim Warden ..... 100 Hours



*Insects—they fascinate us, they bug us, they surround us, they bite us—but what would a summer evening be like without them? Join insect specialists and enthusiasts for an evening devoted to discovering insects.*

Grab the entire family and participate in some creepy-crawly fun . . .

# Insect-O-Rama

**Friday, August 25, 6:30-9pm**



PRSR STD.  
US Postage Paid  
Jefferson City Mo  
Permit 274

**Harbinger**  
Springfield Conservation Nature Center  
Missouri Department of Conservation  
4600 South Chrisman  
Springfield, MO 65804-4931  
Phone 417/888-4237  
Fax: 417/888-4241  
Serving nature and you





# July Events



SPRINGFIELD CONSERVATION NATURE CENTER

Call the nature center at 417/888-4237 on or after July 1 to register for July programs requiring registration. If you are unable to attend a program, please call to cancel so that someone on the waiting list may attend.

## 1 Hiked It . . . Liked It! Weekend Hike

*Saturday, 9–11am*  
Enjoy a volunteer naturalist-guided hike on the trails. Families.



## 6 Discovery Table Cool Little Fish

*Thursday, 10am–2pm*  
Have you ever wondered how to identify little fish? Stop by anytime and discover minnows, shiners, darters, and others that live in Missouri waters.

## 8 For Adults Only Snorkeling

*Saturday, 8am–5pm*  
Join us for a day of underwater exploration. Look for longpincered crayfish, sculpins, madtoms, and more as we snorkel in the North Fork of the White River. Meet at the nature center and carpool. Wear clothes you can get wet. Bring a sack lunch, sunscreen, and change of clothes. Masks and snorkels will be provided. Ages 18-adult. Registration required.

## Woodcarving Demonstration

*Saturday, 10am–4pm*  
Drop by to visit with members of the Southern Missouri Woodcarving Artists as they share information with the “wood-be” carver, demonstrate carving techniques, show works in progress, and sell some of their art pieces.

## Hiking Club


*Saturday, 8–11pm*  
Beat the summer heat on this moonlit night hike with Volunteer Naturalist Doug Gilliam as he leads a three-mile hike at Busiek Conservation Area. Bring water, flashlight, and wear sturdy shoes. Hike is rated moderate in difficulty. Meet at the nature center and carpool. Ages 18-adult. Registration required. *In order to accommodate more participants, Hiking Club trips are limited to one per month.*

## 12 Conservation TEEN Club Niangua Float Trip

*Wednesday, 8am–4pm*  
Come along as we explore one of the most popular streams in the Ozarks. We'll begin below the spring and paddle several miles down the Niangua River. Lunch and transportation provided. Ages 12-17. Registration required. *This Niangua Float Trip is offered twice this month but you may only sign up for one trip.*

## 13 Conservation TEEN Club Niangua Float Trip

*Thursday, 8am–4pm*  
Come along as we explore one of the most popular streams in the Ozarks. We'll begin below the spring and paddle several miles down the Niangua River. Lunch and transportation provided. Ages 12-17. Registration required. *This Niangua Float Trip is offered twice this month but you may only sign up for one trip.*

 **Ms. Ladybug is on vacation.**  
**She will return in August**  
**for another story time.**

## 13 Babes In The Woods Celebrates Summer

*Thursday, 10–10:45am or 6–6:45pm*  
Summer breezes make us feel fine as Volunteer Naturalist Tracy Richter leads you and your favorite 0-2 year old on a guided nature stroll. Registration required.

## Discovery Table: Caves

*Thursday, 10am–2pm*  
Learn all about these underground habitats and the animals that call them home. Stop by anytime.

## 14 Conservation TEEN Club Canoe Crew Cleanup

*Friday, 9am–Noon*  
Come and enjoy a summer morning on the water while cleaning the nature center shoreline using canoes. Meet at Lake Springfield's Southwood Access and paddle to the nature center. *Call for directions.* Ages 12-17. Registration required.

## Bored? Measure A Board

*Friday, 10–11:30am*  
Join Volunteer Naturalist Earl Niewald and use the tools of a forester to determine the volume of wood in a tree and other calculations. Meet at Living Memorial Park. Ages 9-12. Registration required.

## 16 Primitive Skills Series Making Cordage

*Sunday, 1–3pm*  
Volunteer Naturalist and primitive skills specialist Don Brink demonstrates how to weave plant fibers into cordage. Try your hand at this age-old skill and learn about the plants primitive man used to make cordage. Stop by anytime.

## LITTLE ACORNS

LITTLE ACORNS programs are for children 3-6 years and are 45-minutes in length. Please limit LITTLE ACORNS programs to one per month. Registration required.

### Ant Antics

March right in to learn more about the lives of these common insects. Meet the real thing firsthand and take home your own “ant.”

**Friday, July 14, 10am or 1pm**  
**Saturday, July 15, 11am**

### Leapin' Lizards

Lizards don't really leap, but they sure are fast! Come learn about the speedy life of a lizard and why they need to be so swift.

**Friday, July 21, 11am or 1:30pm**

### Cool Cave Creatures

Don't be in the dark about cool cave creatures and features. Join the fun as we go “underground” to see what life in a cave is all about.

**Friday, July 28, 11am or 1:30pm**

**VIDEOS ARE SHOWN  
EVERY SUNDAY  
FROM 2-3pm.**

## 18 Hiking Club

*Tuesday, 6–9pm*  
Enjoy an evening stroll with Volunteer Naturalist Doug Gilliam at Ritter Spring Park. Meet at the nature center and carpool. Hike is three miles and rated easy to moderate in difficulty. Meet at the nature center and carpool. Ages 18- adult. Registration required. *In order to accommodate more participants, Hiking Club trips are limited to one per month.*

## 20 Discovery Table: Hummingbirds

*Thursday, 10am–2pm*  
Drop by to discover what makes hummingbirds unique among all their avian cousins and make a hummingbird craft.

## 22 Ready . . . Aim . . . Fire!

*Saturday, 10am–1pm*  
Bring your family and drop by anytime to try your hand at learning some new outdoor shooting skills. Kids (ages 6 and above) and adults can try archery, shooting pellet guns, and a laser shot video game. Instruction and safety equipment will be provided to safely introduce your family to the fun of outdoor shooting skills. Ages 6-adult.

## 23 Ready . . . Aim . . . Fire!

*Sunday, 1–4pm*  
Bring your family and drop by anytime to try your hand at learning some new outdoor shooting skills. Kids (ages 6 and above) and adults can try archery, shooting pellet guns, and a laser shot video game. Instruction and safety equipment will be provided to safely introduce your family to the fun of outdoor shooting skills. Ages 6-adult.

## Summer Hummers

*Sunday, 5–6:30pm*  
Join hummingbird bander Sarah Driver as she shares her knowledge about Missouri's smallest bird and attempts to capture and band some. Families. Registration required.

## 25 Conservation Kids' Club Ready . . . Aim . . . Fire!

*Tuesday, 6:30–7:30pm or 7:30–8:30pm*  
Kids, here's your chance to try your hand at some cool outdoor shooting skills. Learn how to shoot a pellet gun, pop a balloon target by using a bow and arrow, and test your sharp-shooting skills with a laser shot video game. All safety equipment and instruction will be provided to introduce you to these exciting activities. Ages 7-12 only. Please, no younger siblings. Registration required.

## 27 Discovery Table Beautiful Butterflies

*Thursday, 10am–2pm*  
Discover Missouri's beautiful butterflies and learn about their fascinating life cycle. You can also create your own butterfly to take home. Stop by anytime.



Please note that our indoor programs are being offered on a limited basis during July and the first half of August to accommodate the demolition of our current sprinkler system and the addition of a new system. There will also be times that part of the building or exhibit area will be closed during this process. We apologize, in advance, for this inconvenience.



# August Events



SPRINGFIELD CONSERVATION NATURE CENTER

Call the nature center at 417/888-4237 on or after August 1 to register for August programs requiring registration. If you are unable to attend a program, please call to cancel so that someone on the waiting list may attend.

**Visit the Conservation Department's building at the Ozark Empire Fair from July 28 to August 6.**



## **3 Discovery Table Sliders, Snappers, And More**

*Thursday, 10am–2pm*  
Slide on in and snap up some turtle information. Stop by anytime.

## **5 Hiked It . . . Liked It! Weekend Hike**

*Saturday, 9–11am*  
Enjoy a volunteer naturalist-guided hike on the trails. Families.



## **9 Conservation TEEN Club Snorkeling**

*Wednesday, 8am–5pm*  
Come beat the heat and experience a fish-eye view of an Ozark creek. No prior snorkeling experience is necessary. Transportation and lunch will be provided. Ages 12-17. Registration required.

## **Story Time With Ms. Ladybug**

*Wednesday, 11–11:30am*  
Join Volunteer Naturalist Joyce Tolliver as she reads a nature story and shares activities with your 2-6 year olds. Please, no organized groups.



## **10 Discovery Table Aquatic Insects**

*Thursday, 10am–2pm*  
Discover the tiny world of aquatic insects by investigating stream and pond water. Stop by anytime.

## **12 Hiking Club**

*Saturday, 8am–1pm*  
Cool off this summer by wading through the Spring River near Mt. Vernon. Volunteer Naturalist Mike Mihalik will lead you on a wade through this spring fed river, so wear clothes you can get wet. Hike is easy to moderate in difficulty. Meet at the nature center and carpool. Bring plenty of water, pack a sack lunch, and wear sturdy shoes. Ages 18-adult. Registration required. *In order to accommodate more participants, Hiking Club trips are limited to one per month.*

## **18 Hunter Education**

*Friday, 6-9pm and Saturday, 8am-5pm*  
This 10-hour course is required for anyone born after January 1, 1967, who wants to hunt with firearms in Missouri. This course is continued on Saturday from 8am to 5pm (lunch break given—lunch not provided). You must pass a written test to be certified. Ages 11-adult. Students under 15 years of age must be accompanied by an adult and bring proof of age. *Call today to register.*

## **20 Primitive Skills Series Primitive Traps**

*Sunday, 1–3pm*  
Volunteer Naturalist and primitive skills specialist Don Brink will demonstrate a variety of primitive traps early man used to successfully catch wildlife for food. Learn how the traps were constructed, what materials were used, and how they worked. Ages 12-adult. Registration required.

## **22 Hiking Club**

*Tuesday, 6–9pm*  
Volunteer Naturalist Mike Mihalik will lead an evening hike on a portion of the Sac River Bike Trail. Hike is three miles in length and moderate in difficulty. Bring plenty of water and wear sturdy shoes. Meet at the nature center and carpool. Ages 18-adult. Registration required. *In order to accommodate more participants, Hiking Club trips are limited to one per month.*

## **23 Babes In The Woods And Bugs, Too**

*Wednesday, 10–10:45am or 6–6:45pm*  
Grab your stroller and join the fun! You and your favorite Little Person (0-2 years old) will be introduced to the outdoors and the fascinating bugs of summer by Volunteer Naturalist Tracy Richter. Registration required.

## **25 Insect-O-Rama**

*Friday, 6:30–9pm*  
Insects—they fascinate us, they bug us, they surround us, they bite us—but what would a summer evening be like without them? Join insect specialists and enthusiasts for an evening devoted to discovering insects. Grab your entire family and participate in some creepy-crawly fun! All ages.

*The Conservation Kids' Club  
will not be meeting in August.*

*Plan on bringing your entire  
family to participate in  
Insect-O-Rama.*



**VIDEOS ARE SHOWN  
EVERY SUNDAY  
FROM 2-3pm.**

## **26 For Adults Only Niangua River Float Trip**

*Saturday, 8am–5pm*  
If you're a first-time or novice canoeist, this is a great chance "to get your feet wet." Come enjoy one of the best recreational pastimes the Ozarks has to offer. Meet at the nature center and carpool. Wear clothes you can get wet. Bring a sack lunch, plenty to drink, sunscreen, and change of clothes. Ages 18-adult. Registration required.

## **27 Summer Hummers**

*Sunday, 5–6:30pm*  
Both adult hummingbirds and their young are visiting feeders prior to fall migration. Join hummingbird bander Sarah Driver as she shares her knowledge about Missouri's smallest bird and attempts to capture and band some. Families. Registration required.

## **LITTLE ACORNS**

**LITTLE ACORNS** programs are for children 3-6 years and are 45-minutes in length. Please limit **LITTLE ACORNS** programs to one per month. Registration required.

### **Neat Night Jars**

Night jars are more than containers that are used to house fireflies. Come learn about mysterious nighttime birds that are also called "nightjars."

**Friday, August 4, 11am or 1:30pm**  
*Registration begins July 15*

### **Mudbug Mystery**

Have you ever heard of a mudbug? They're small, they live in the water, they have a hard shell, and you can eat them. Still mystified? Come and learn about crawfish and see some up close.

**Friday, August 11, 1pm or 6:30pm**  
**Saturday, August 12, 11am**

### **Turtlemania**

Don't be stuck in your shell all summer! Come explore the world of snappers, sliders, stinkpots, and more.

**Friday, August 18, 11am or 1:30pm**  
**Saturday, August 19, 11am**



Please note that our indoor programs are being offered on a limited basis during July and the first half of August to accommodate the demolition of our current sprinkler system and the addition of a new system. There will also be times that part of the building or exhibit area will be closed during this process. We apologize, in advance, for this inconvenience.